- Edges with an endpoint in T_n^i. The number of such edges is at most $2|S|(1-(1-\omega)^2)|V(G_n)|$.
- Edges from Z_n^i to the complement of W_n^i, for some $1 \leq i \leq k_n$. The number of such edges is at most $2|S|\omega(1-\omega)^{-1}|V(G_n)|$.
- Edges from Z_n^i to $W_n^i \backslash Z_n^i$ for some $1 \leq i \leq k_n$. The number of such edges is at most $2|S|\omega(1-\omega)^{-1}|V(G_n)|$.

Hence

$$\liminf_{n\to\infty} \frac{|E_n^\omega|}{|V(G_n)|} \leq 2|S|\left((1-(1-\omega)^2) + 2\omega(1-\omega)^{-1}\right).$$

Therefore $\mathcal{G}$ is hyperfinite. $\square$

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